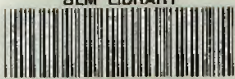


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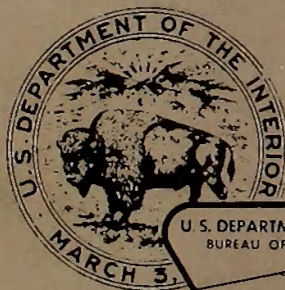
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# ORGAN MOUNTAIN RECREATION LANDS

## INTERPRETIVE PLAN



DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
LAS CRUCES DISTRICT

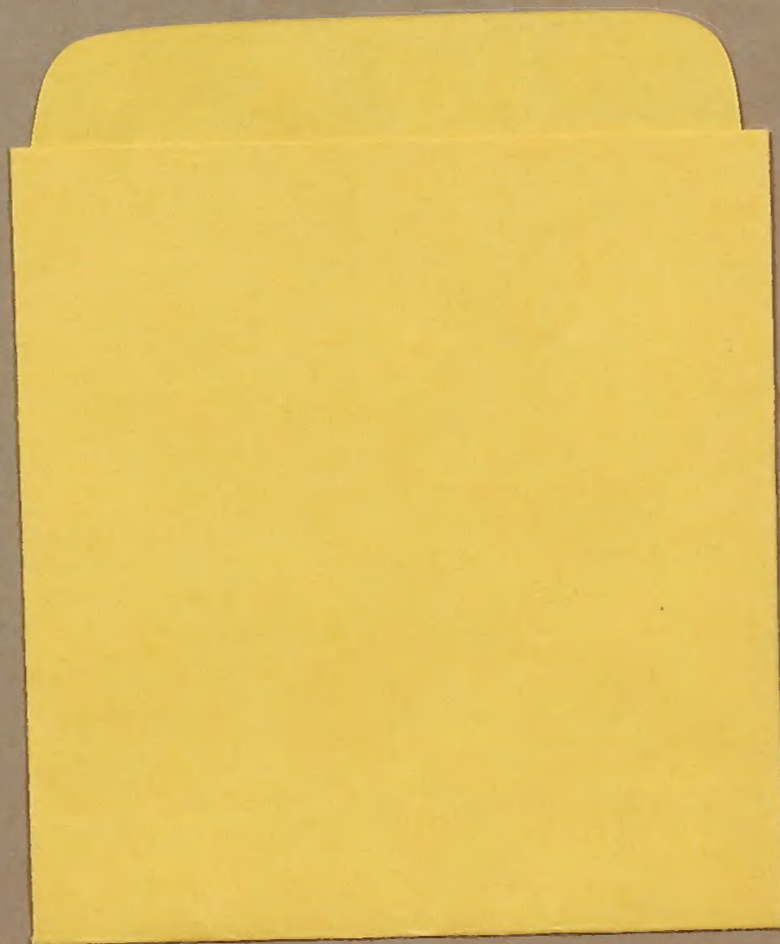
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ORGAN MOUNTAIN RECREATION LANDS INTERPRETIVE PLAN

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Date 1-20-76

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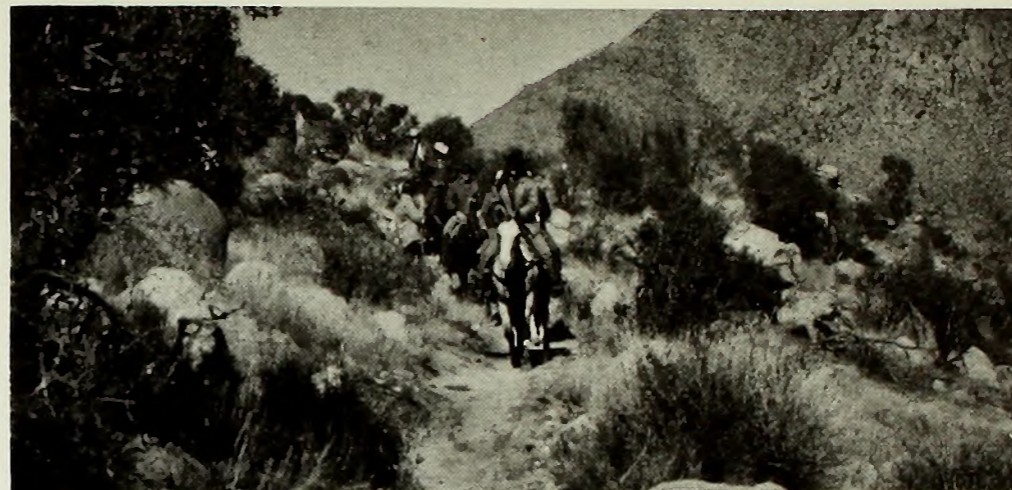
Date 1-25-78

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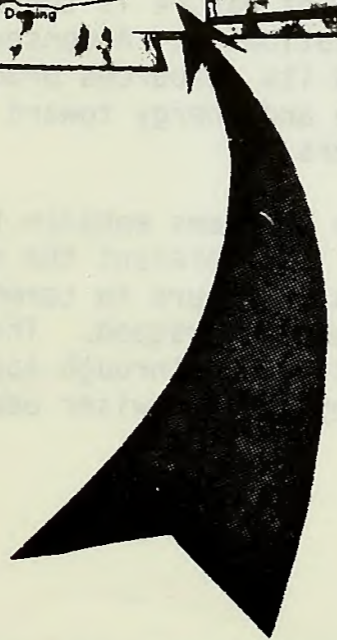
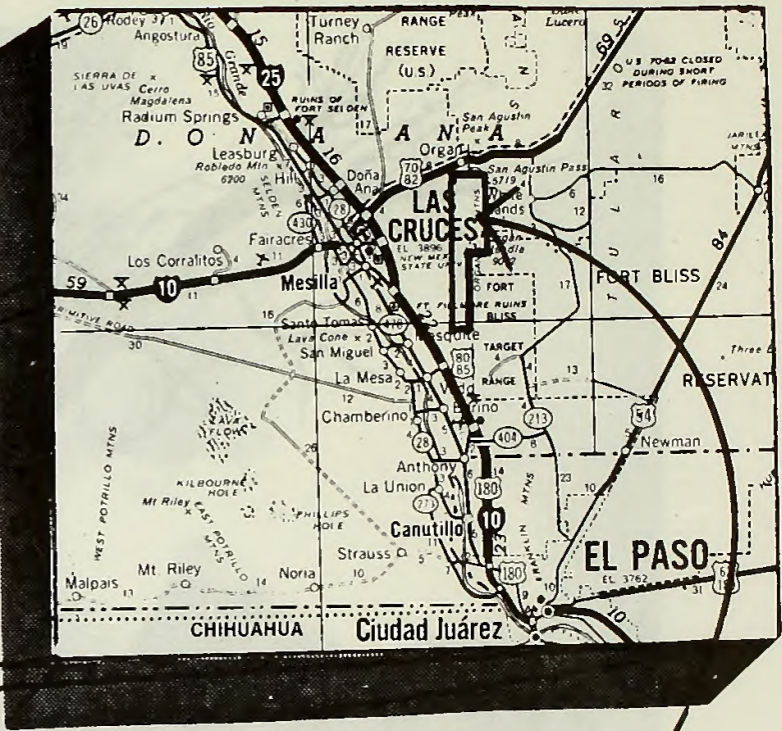
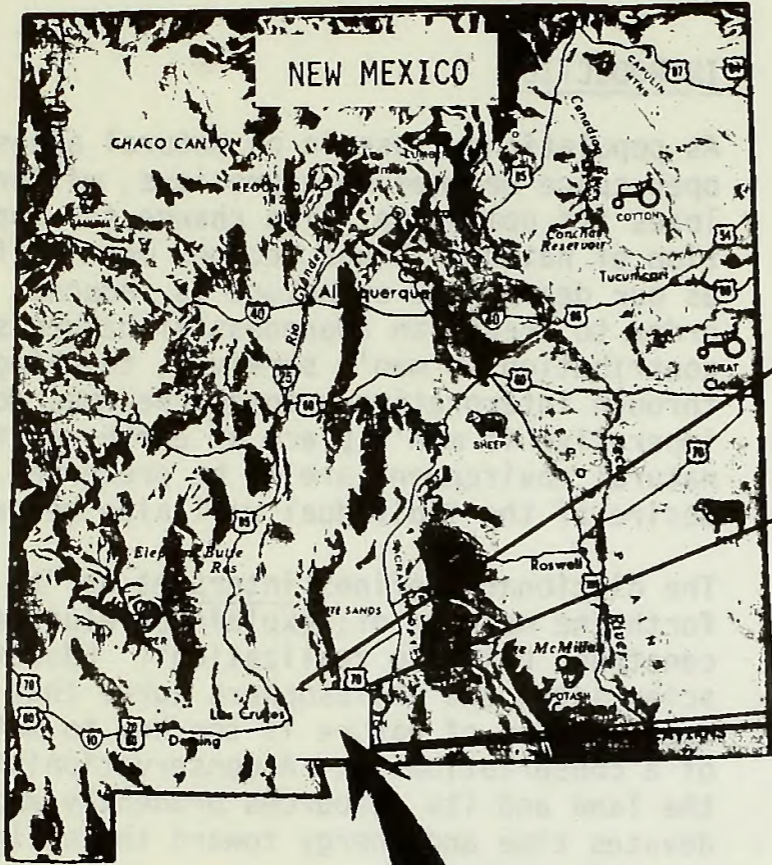


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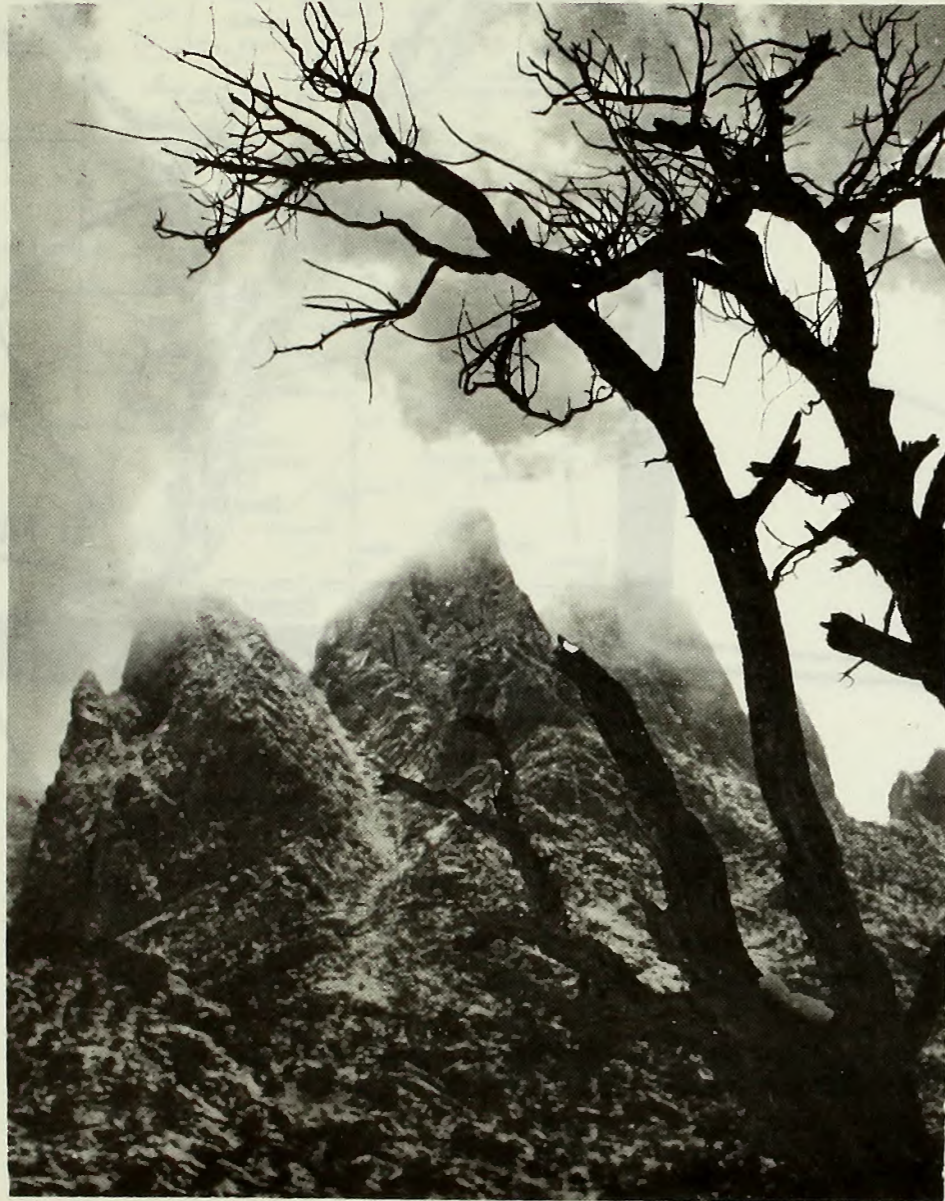
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ORGAN MOUNTAIN RECEPTINAL LANDS





## INTRODUCTION

As populations close in on natural areas and open space becomes more precious, wilderness loses its dominance. The chance for appreciation of natural things becomes more difficult as our dependence on nature is reduced. In order to create an awareness of nature's contribution to man's survival, teaching through interpretive programs becomes more imperative if man's place on earth and the natural environment are to be preserved. The desire of the individual will also be satisfied.

The dictionary defines interpret as "to set forth the meaning of; explain or elucidate; construe; bring to realization". Educators, scientists, and philosophers agree that appreciation of nature is the key to motivation of a conservationist. A conservationist uses the land and its resources prudently and devotes time and energy toward the enlightenment of others.

Interpretive programs enhance the outdoor experience. They present the mysteries and complexities of nature in terms that can be recognized and understood. Through familiarity comes appreciation; through appreciation comes greater enjoyment and wiser use of the natural resources.



## PURPOSE AND OBJECTIVES

The Organ Mountains, rich and abundant in natural resources, exemplify a variety of ecological regions within the broad area of southern New Mexico. These resources provide opportunity, through their unique accumulation and proximity to multitudes of people, for boundless interpretation.

This plan provides guidance for interpretive development of the Organ Mountains. The plan does not make final decisions on numbers and kinds of exhibits. The purpose of the plan is to stimulate the creativity of the persons who will formulate more detailed and specific plans and designs if needed.

The objective of the plan is to:

1. Create in the visitor an appreciation for his natural surroundings.
2. Make the visitor more aware of the scenic, ecological, geological and cultural resources in the Organ Mountains.
3. Build a concept within the mind of the individual which will motivate him toward prudent use of the land and its resources.
4. Make the visitor's recreation experience something more than the usual outdoor occasion.





## INTERPRETIVE POLICIES

1. Initial interpretive development should be in those areas of the Organ Mountain Recreation Lands normally accessible to and frequented by the largest number of visitors.
2. Interpretive services should be provided only when and where it is possible to provide programs or services of high quality. Anything less is detrimental to the public image of and attitudes toward the Bureau of Land Management.
3. Initial interpretive developments should be selected and designed to require a minimum use of personnel for interpretive purposes.
4. Subject matter presented in exhibits, signs, or other interpretive facilities and activities should be selected for interest and value to the Organ Mountain visitor.
5. Discussions or statements regarding resources, places, events, or persons should be positive, contain fact, and should not contain derogatory statements or connotation.
6. Provision should be made in buildings and other facilities for the needs of handicapped persons.
7. Interpretation should be planned in consideration of the very young persons as well as the adult generation.
8. Interpretive exhibits, legends, and facilities should be developed so that they give the feeling of comfort, relaxation, ease, simplification, and understanding. They should be of compatible design, and made of materials native to the area as much as possible.
9. Where applicable, bilingual legends should be used. This is especially appropriate in the interpretation of cultural and historical aspects.
10. Personnel meeting and dealing with the public should be skilled in making presentations; they should be trained and knowledgeable in subject matter; they should be dressed in clean, neat BLM uniforms; and their attitudes toward the BLM and the public should be receptive and positive.







### THE ORGAN MOUNTAINS

At the southern tip of the Rocky Mountains, a ridge of verticle, needle-like rock formations protrude above the valley floor 5100 feet. Formed by monzonite intrusion, or the upwelling of rock within the earth's crust, the formations resemble pipes of a stupendous organ.

The Organ Mountains, as the range is known, offer the intriguing challenge of solitude and beauty known to the endemic environment of the southwestern desert.

On the slopes of the foothills, some of the first space men trained for lunar landings under Apollo projects. In the early evening the shadows of the "pipes" creep out across White Sands, headquarters of the vast missile testing facility, and onto the Ft. Bliss military reservation and gunnery range. Echos of the first atom bomb burst 88 miles to the north 30 years ago can still be imagined coming from the crags and canyons.

Scenery: The rugged, towering, pinnacle rock formations provide an unexcelled scenic resource. Higher elevations of the eastern slopes are covered with conifers and deciduous trees and shrubs. Boulder fans are prominent on both eastern and western approaches to the mountains. Visability from the mean elevations range up to 100 miles, including parts of Mexico. The scenic resource is a prime attraction to the Organ Mountains.



## The Visitor

Within one hour's driving time from the Organ Mountains, there is a population total in excess of 600,000 U. S. citizens, plus over 500,000 citizens of Mexico living in Juarez.

Las Cruces and White Sands Missile Range are the communities closest to the mountains and have a combined population of about 55,000 people.

El Paso is 45 miles away, with a population of over 350,000 persons. Alamogordo and the communities of the Mesilla Valley combined make up the remainder of the closeby population.

The population area has within it, 2 universities, 1 college, 13 high schools, and 32 junior high schools, 15,000 Boy Scouts and Girl Scouts, and 4 organized environmental groups including mountain climbers, the Audubon Society, Wilderness Society, and the Sierra Club.

Visitation in the Organ Mountains exceeds 125,000 visits per year. The Aquirre Spring Recreation Site is most popular with about 80,000 visits per year. People of all ages visit the picnic area yearround. Many hike the trails and some participate in scientific study projects related to school activities. Groups of 25 persons or more frequent the area.





## INTERPRETIVE RESOURCE INVENTORY

GENERAL CATEGORY: Geology

SUBJECT: Organ Mountain Structure

The Organ Mountain Mass is a unique and spectacular topographic feature in this region. It is a multi-component uplifted block, comprising basement granite overlain by marine sedimentary strata that is capped by a thick sequence of volcanic rock. These rocks were intruded by magma (internal volcanic rock) that lifted the pre-existing rocks from a near horizontal position to a near vertical position.

The jagged spires are volcanic rock that have been turned on edge. They resemble the pipes of a giant pipe organ. These monoliths of barren rock present a remarkable skyline from either side of the mountain.

This part of the mountain is abruptly steep and inaccessible. It is bordered on the flanks by extensive boulder fans. These fan slopes form a skirt on each side that provides a connection between the towering mountain mass and the supporting plain.

SUBJECT: Tularosa Basin

The entire central portion of the Tularosa Basin which is the vast valley to the east of the Organ Mountains, can be seen from

nearly any location or recreation facility in the Organs. The basin is a downdropped massive Precambrian formation lying between the Organ Mountains, San Andres-Oscerro Mountain Range and the Sacramento Mountains. The basin is about 50 miles in width and includes the White Sands National Monument which is a large, pure white gypsum deposit with dunes up to 50 feet high. Lake Lucero northwest of White Sands is the center of internal drainage in the basin.

SUBJECT: Minerals - Gem Stones

The community of Organ on U.S. 70, directly north of the Organ Mountain Recreation Lands, was a center of mining activity until shortly after World War Two. Gold and silver were the principal ores mined. Today, small amounts of fluorspar is mined at the south end of the Organs in the Bishop's Cap area.

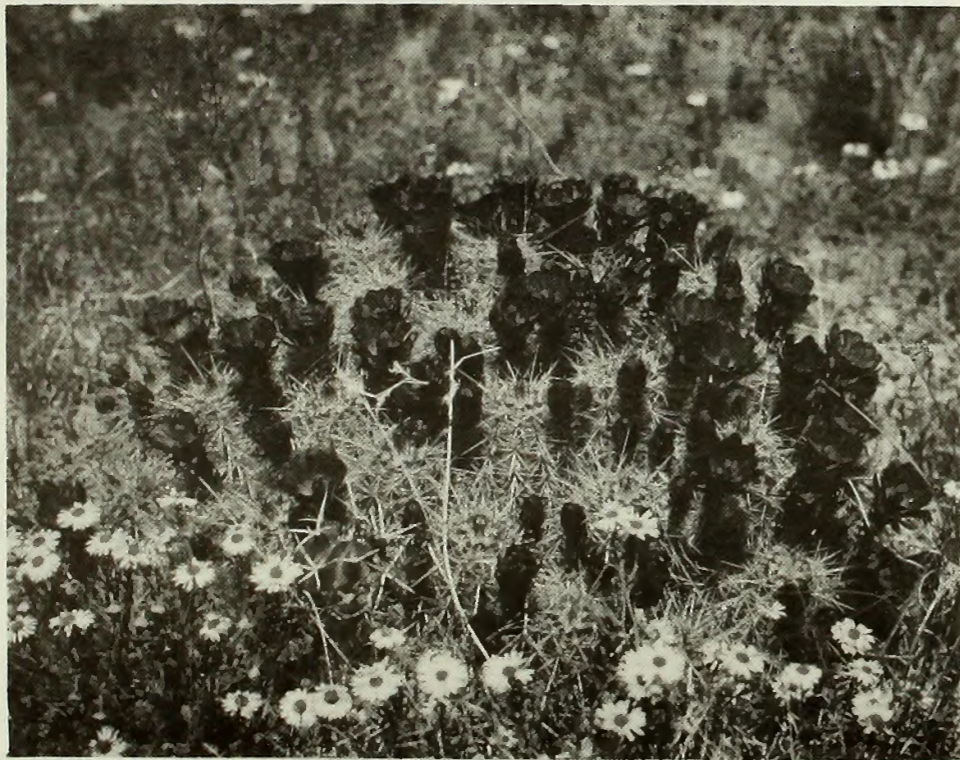
Old mine dumps offer opportunities for rockhounding. Wulfenite, smithsonite, cervissite, anglesite, sphalerite, banded serpentine, mica, and garnet are most common.

SUBJECT: Erosion Processes

The large boulder fans and sand flows which abut the Organ Needles have been created by erosion taking place over millions of years. The spire formations are cores of intruded



rock left exposed after all other surface material eroded away. Decomposed granite soils wear away easily under the pressure of wind and rainfall. The patterns of movement and action causing elements offer interpretive potential.



GENERAL CATEGORY: Ecology

SUBJECT: The Life Zones

Ecologists refer to altitudinal zones as "life zones". Two systems are commonly used in this region to classify life zones - Merriam's and Clement's. Merriam's Life Zone is based on a single factor of the environment, namely temperature, whereas Clement's is based on the total environment including the vegetation. For the purpose of interpretation, the vegetation and environment best determine the life zone rather than temperature zones as applied by Merriam.

The Organ Mountains contain four life zones: The Lower Sonoran Zone (creosote bush, mesquite, and soap tree yucca); the Upper Sonoran Zone (pinon-pine); the Transition Zone (ponderosa pine and Gambel's Oak) and the Canadian Zone (white fir, Douglas fir and aspens). The zones range from 4000' to 5500'; 5,500' to 7000'; and 7000' to 9000'; and 9000' to 10,000' respectively.

Between each zone is an overlap, or "edge" effect where a change of species is noticeable. The "edge" effect tends to colonize species which identify with each zone. The concentration of species is usually greater in these edge areas than in the central portion of the life zone.



The Lower Sonoran Zone of the area is typically the adjacent flat, or valley land. Dominant vegetation of this zone is creosote bush, mesquite, and grama grasses. On the west face of the Organs, the Lower Sonoran Zone extends up to the middle slopes (approximately 6,500' elevation) where it intermingles with the Upper Sonoran Zone (species of both zones occur together). On the east side, the Lower Sonoran Zone is restricted to the flat lands, or about the 4,500' elevation.

The Upper Sonoran Zone is the largest zone in the mountains. Vegetation species of this zone are typically pinyon and juniper, little leaf mahogany, Wright's silktassle, and oak species. This zone occurs on the west facing slope where it intermingles with the Lower Sonoran Zone at the lower slopes of the mountains and extends to the upper slopes (approximately 7,500') where an interspersion with the species of the Transition Zone occurs. On the east side, the Upper Sonoran Zone extends from the base of the mountains to the middle slopes, or approximately 6,500' to 7,000' elevation. The limit of this zone on north facing slopes is similar to the east slopes whereas south facing slopes are approximately the same as west slope occurrences.

The Transition Zone is the ponderosa pine belt, which occurs from approximately the 7,500' elevation to the 8,500' elevation on the north and east facing slopes. Vegetative species commonly

occurring in this zone are ponderosa pine, a few pinyon and juniper trees, oak species, and mountain mahogany. This zone is restricted in the Organs, as necessary site factors are essentially limited to the north half of the mountains in the Organ Peak area.

The Canadian Zone occurs near the mountain tops and primarily on the east facing slopes. Vegetation typical of this zone is Douglas fir, white fir, oak species, and snowberry.

Opportunities for interpretation of the life zones by separating them into ecological subjects is enhanced by the proximity of the vegetative and wildlife features. The terrain rises through the life zones abruptly, creating situations where a viewer could compare subject matter in two or more life zones from one vantage ground. Approximately 800 vegetative species have been identified in the Organ Mountains and adjacent flat lands.

SUBJECT: Wildlife

Animals include the invertebrates as well as the more obvious mammals, birds, reptiles, fishes, and amphibians. Many of the animal activities and adaptations are directed toward feeding, reproducing, avoiding predators, and avoiding unfavorable environmental conditions. Careful observation of the anatomy and behavior of an animal often reveals much about its ecology.



Feeding organs, specialized senses, mobility, size and social organization are examples of characteristics of an animal that indicate much about its ecology.

Interpreting the Organ Mountain wildlife includes an attempt to make the visitor aware of faunal communities inhabiting the region, their relationship to each other, their ability to survive in the area, and their contribution to mankind. (Example: The roll of microfauna in recycling minerals and in affecting structure and porosity in soil, which in turn supports plant life.)

Wildlife distribution is often related to four life zones. Major species associated with individual zones are as follows:



#### Lower Sonoran Zone

Wildlife species characteristic of this zone are cottontail rabbits, Gambel's and scaled quail, desert mule deer, roadrunner, western box turtle, and lesser earless lizard.

#### Upper Sonoran Zone

Wildlife species typical of this zone include mule deer, desert bighorn sheep, tree lizard, blacktailed rattlesnake, ringtail cat, pinyon jay, and Steller jay.

#### Transition Zone

Species typical of this zone are the great horned owl, screech owl, red squirrel, mountain lion, and Mexican vole.

#### Canadian Zone

Wildlife species occurring in this zone include longtail weasel, dusky shrew, grey shrew, harlequin quail, and mourning dove.

Often wildlife species will spend portions of the year in one life zone and move into another, or inhabit all four zones during the year. Preliminary information indicates that species of insects, spiders, small mammals, and perhaps some reptiles may be endemic. These populations, when found, are associated with undeveloped springs or seeps, or steep-walled, well shaped canyons.



SUBJECT: Mammals

Animal communities in the Organ Mountains are important interpretive resources. Game animals living here provide a non-consumptive as well as consumptive use. A two day annual deer hunt provides recreational hunting and also contributes to stabilization of the herd. Desert bighorn sheep migrating southward from the San Andres National Wildlife Refuge frequent the Needles area of the Organs, and four elk have been seen near Organ Peak in recent years.

While hunting deer is a recreational use of wildlife, the greatest values of mammals in the area are believed to be non-consumptive, viewing, scientific study, and their interpretive potential.

More than eighty species of mammals are known to inhabit the Organs. Species which can most frequently be seen are: mule deer, badger, skunk, coyote, bobcat, squirrels, chipmunks, gopher, mice, porcupine, jackrabbit, cottontail rabbit, and pronghorn antelope.

SUBJECT: Reptiles - Amphibians

Approximately sixty species of reptiles and amphibians live in the Organ Mountains.

These species of wildlife present a variety of interpretive opportunities primarily because

of their contributions to ecological succession and the fact that their likelihood is unknown to most visitors.

Species considered to be rare include the Trans-Pecos rate snake, Texas lyre snake, and three species of spadefoot toad occurring together in the same range.

Reptiles and amphibians frequently sighted are: box turtle, collared lizard, tree lizard, coachwhip snake, king snake, black-tailed rattlesnake, western diamondback rattlesnake, barred tiger salamander, and horned toad.

SUBJECT: Birds

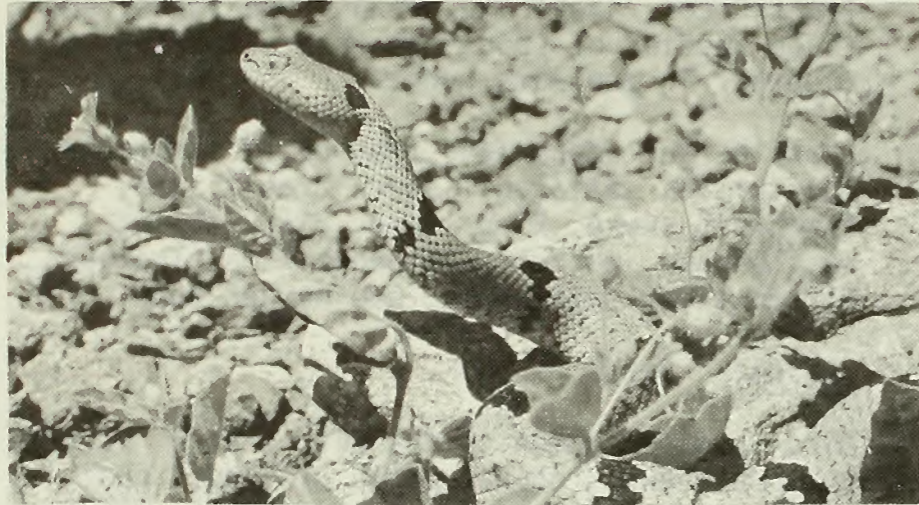
Bird species common to the Organs are: turkey vulture, hawks, golden eagle, falcons, quail, doves, roadrunner, owls, hummingbirds, flickers, woodpeckers, fly catchers, swallows, jays, ravens, wrens, sparrows, robins, bluebirds, warblers, grosbeaks, finches, and juncos.

Research done by New Mexico State University found more than 185 bird species. Some species use the area seasonally, while other inhabit the ranges yearround.

A State Game Refuge lies within the recreation lands boundary. The purpose of the refuge is primarily for protection of quail populations. Considerable emphasis is given to bird species in the area by the Audubon Society, New Mexico



State University, and the general recreating public.



Many endangered or threatened wildlife species are found here. Some are the prairie falcon (T), southern bald eagle (E), Baird's sparrow (E), McCown's longspur (E), Mississippi kite (E), and the spotted bat (T).

Current use of wildlife is of two types, consumptive and non-consumptive. Consumptive use - that which is harvested through hunting - is quite low. Non-consumptive use, particularly visual appreciation, increases as recreational use of the area increases. All species are affected equally.

GENERAL CATEGORY: Climate

SUBJECT: Climate of the Organ Mountains

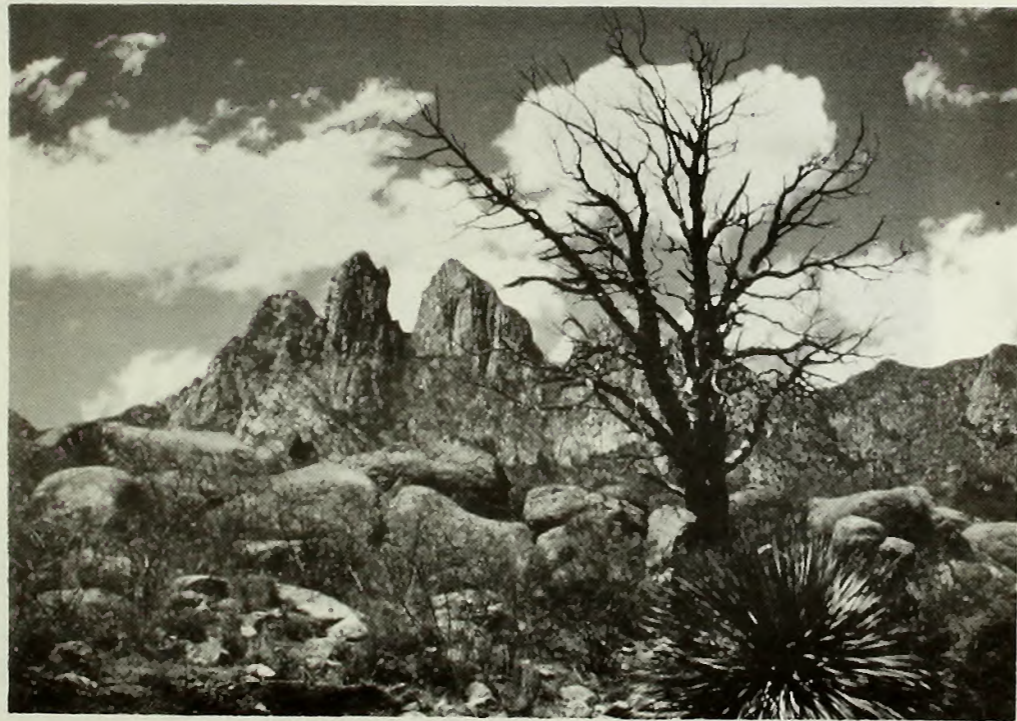
One of the prime attractions of the Organ Mountains is relief from the hot temperatures of the residential valleys. Natural temperature depression created by increased elevation, vegetative cover, shadows, and soft circulation of air currents make the side slopes of the mountains pleasant to visit.

Rainfall usually occurring during July, August and September measures from 8 to 10 inches annually. In addition, about 4 inches of moisture accumulates during winter months in the form of snow and winter rains. Sunshine can be expected 80 to 90 percent of the time. Except for periodic frontal storms, winters are particularly clear and sunny. Winds, typical of the desert country in the springtime, occasionally reach velocities of near 40 mph. Light snows which fall in the winter are quickly melted by up-slope drafts.

The area is classified as semi-arid. Temperatures range from well below freezing in the upper elevations in winter time to the lower 90's in summer time in the lower elevations.



Climate is a combination of temperature, precipitation, and winds characteristic of a locale or region over a long period of time. Climate, therefore, can be divided into several subjects which more precisely describe the situation as it prevails in the mountain area.



GENERAL CATEGORY: Human Interest Values

SUBJECT: Cultural and Historical Resources

Interest began with early visual and physical appreciation for the mountains. Some of the history of this region relates to events which occurred in the Organ Mountains. Baylor Pass was named for a Civil War military officer who precipitated the surrender of a contingent of Union forces on the east slope of the mountains. The J. W. Cox ranch headquarters, which is visible from most locations on the east side of the mountains, has been nominated for historical site designation in the National Register of Historical Places. Legends and tales relate early use of the mountains as a place to cache gold, hide from enemies, and recoup depleted meat supplies.

Recreational use of the mountains began years ago as the populated valleys nearby began to grow. Picnicking, hiking, mountain climbing, horseback riding, hunting, and general leisure uses encompass most of the recreational activities. Boy Scouts and Girl Scouts practice techniques here, and civic and religious groups gather for pleasure and meditation in the mountains. In addition to this, many scientific studies are carried out yearly by people from New Mexico State University. Apollo Project astronauts practiced moon landings on slopes near the Organ Mountains.

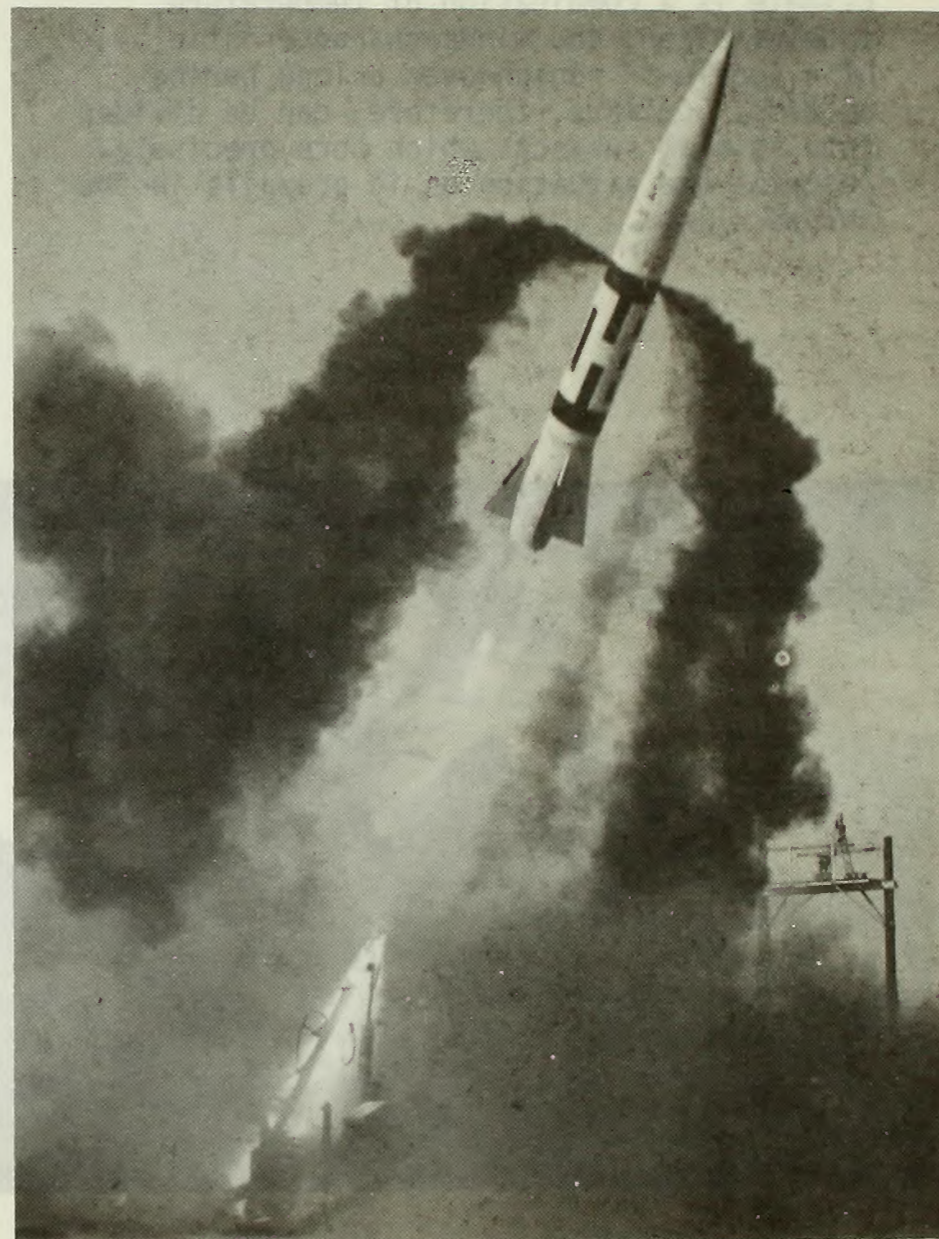


SUBJECT: White Sands Missile Range

White Sands Missile Range, to the east of the Organ Mountains, covers 4000 square miles of New Mexico desert. Within its boundaries may be found a fusion of the old and the new in the military defense of the nation--from Indian arrowheads and ancient cannons to modern missiles and spacecraft.

The world's first atomic device was successfully tested on the northern end of the White Sands Missile Range just one week after the range was established in 1945. The Range supports missile development and test programs for the Army, Navy, Air Force, National Aeronautics and Space Administration, and other Government agencies. It is the largest land area military reservation in the United States.

W.S.M.R. Command Center, including many of the laboratory facilities, support buildings, and the residential community can be seen from nearly any location on the east side of the Organ Mountains.





SUBJECT: Youth Conservation Corps

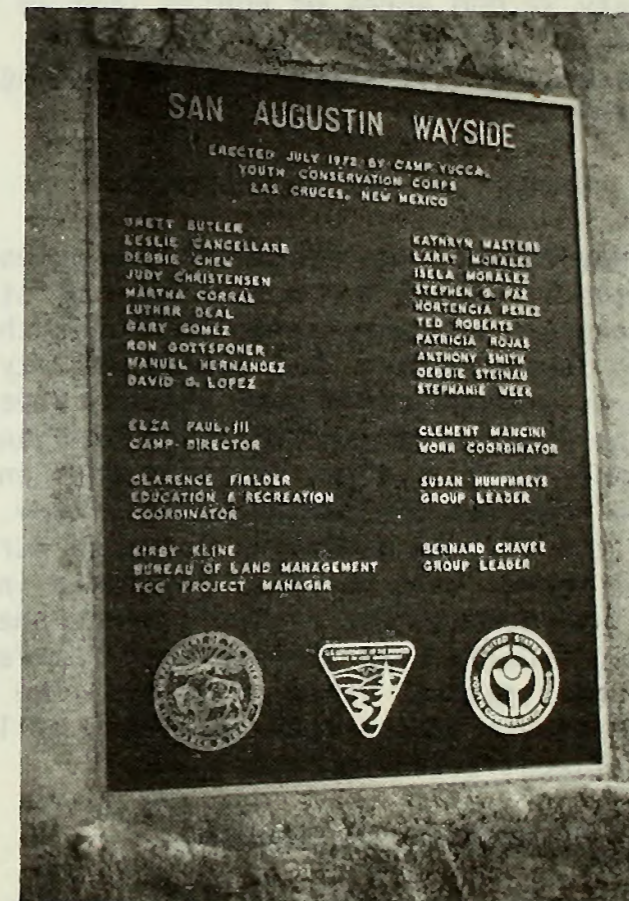
Each year since 1972, corpsmen of the United States Youth Conservation Corps have worked on projects in the Organ Mountains.

The purpose of the YCC Program is to further the development and maintenance of natural resources by employing young men and women to work in a healthful, outdoor atmosphere on the public lands.

Camp Yucca, sponsored by the Las Cruces Office of the Bureau of Land Management, was established in 1972. The corps is made up of young people from the Las Cruces area. The camp is work and education oriented. In order to create for these young people a better understanding of natural resources and their uses, several hours during the eight-week summer program are devoted to environmental education.

Work projects in the Organ Mountains support public recreation through facilities construction, maintenance, and landscaping. The San Augustin Wayside, Aguirre Spring Recreation Site bulletin exhibit, and Baylor Pass Trail Head horse stable were built by the young people of the Corps. Wildlife habitat development projects have included water detention structures, construction of coverts for cover, and landscape seeding. They also constructed the Aguirre Spring Ecology Plot.

The YCC is now an integral part of the BLM District program, providing resource protection and enhancement while contributing to the mental, physical, and financial well-being of the youth in the corps.





GENERAL CATEGORY: Management

SUBJECT: The Bureau of Land Management

The Bureau of Land Management, an agency of the Department of the Interior, administers the national resource lands in the Organ Mountains. The BLM maintains a District office in Las Cruces. Approximately 32,000 acres of public land in the Organ Mountains is managed for recreational purposes as well as livestock grazing, mining, and wildlife habitat.

SUBJECT: History of the Public Lands

After the Revolution, the Continental Congress looked to the 13 States for a land base to start national recovery and provide a future for the country and its citizens. Two hundred thirty seven million acres were acquired from these States, and in 1785, the Congress passed the Land Ordinance Act to sell these lands. Later, in 1812, the General Land Office acquired the Northwest Territory. An additional 1.4 billion acres was acquired during the next 50 years. The purchase of Alaska in 1867 ended the land acquisition period. Since that time, land has continually been transferred from Federal ownership under several laws, until now, the Bureau of Land Management administers about 474 million acres known as national resource lands.

SUBJECT: Multiple Use Management

Management of land for a variety of uses began with

the Taylor Grazing Act of 1934. The Act provided that land could be classified for its highest and best use. Homesteading was allowed, and land exchanges were made to consolidate Federal lands. In 1964, the Classification and Multiple Use Act was passed. It required BLM to take a close look at lands and their resources. The lands were to be classified for disposal or retention, and for multiple use management.

Public awareness of the resource values on public lands has created new dimensions in, and new demands on land management. BLM is meeting the challenge with land use planning which provides for long range use of the land while furnishing protection and consideration for all resources.

Prior to BLM, the public lands were managed by two agencies, the General Land Office and the Grazing Service. The General Land Office was established in 1812, to acquire Federal lands and carry out a program of land sales which was designed to place land on tax rolls across the country. The Department of Interior was charged with administrative control of the public domain in 1934, when the Taylor Grazing Act was passed by the Congress. Soon after that, the Grazing Service was established to administer grazing on the public lands. In 1946, the Bureau of Land Management was formed by combining the two agencies.



## INTERPRETIVE MEDIA

### (a) Personal Services

In order to tell the story of the Organ Mountains, the best selection of methods should be used. It is possible to attract and hold the attention and interest of the individual by appealing to one or more of the five senses. He may be able to see a flower, but if he were able to smell it also, he would experience a deeper relationship. The same is true of hearing natural sounds and touching or feeling an object. Media selection should consider these factors.

The services of an interpreter are considered extremely valuable with other forms of interpretation being considered supplemental. Personnel trained in making interpretive presentations can adjust to a wide variety of circumstances and they can vary presentations to satisfy different groups. Experience has shown that visitors are especially receptive to personal services. The personality and "uniform" of the interpreter enhance the process of interpretation.

Personal services require talented and trained personnel. The number of people needed can be minimized by limiting the periods and types of presentations. Self-service interpretation is fixed and continuous and can suffice for most periods of time when personal services cannot be provided.

### (b) Exhibits

#### (1) Information Centers

An exhibit center provides an opportunity for the visitor to observe and enjoy realistic subjects in a natural setting at his own pace. It affords the opportunity for the exhibitor to present objects and exhibits which the visitor may not otherwise be able to see.

The exhibit center acts as an introduction to the remaining subject matter beyond. If established properly, it will create interest and enthusiasm which will motivate the visitor to explore further, thereby fulfilling the desire to learn as well as the desire to teach.

The exhibit center usually is environmentally acceptable and provides comfort and relaxation. It can also be the area management center, reducing the number of personnel required to do the over-all job.

#### (2) Wayside Exhibits

Wayside exhibits afford the interpreter an opportunity to be specific. By capitalizing on the motivating quality of a specific feature, usually quite unique, unusual or outstanding, it can relate much more than what can be seen any other place. The wayside





exhibit is singular in nature and in this way contributes to the over-all story.

### (3) Self-guiding Trails and Tours

Self-guiding trails and tours can serve as an extension of the exhibit center and wayside system, or it can be an independent means of providing interpretation. Usually the self-guiding program works both ways.

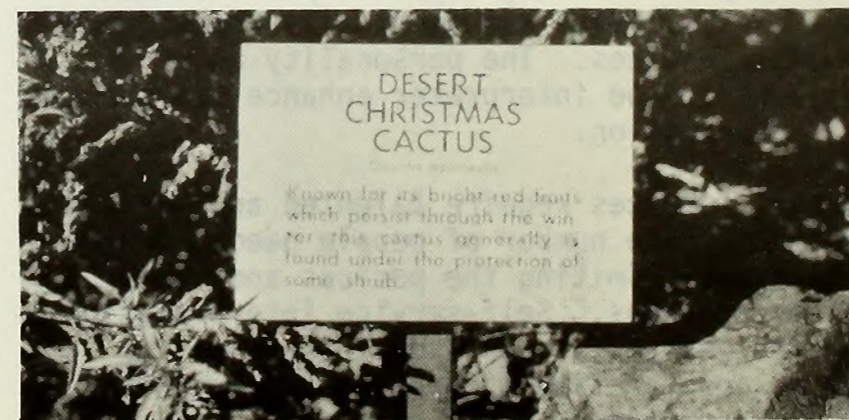
The self-guiding system allows the visitor to become part of the act of interpretation. He combines the interpretive activity with other activities such as hiking, riding, photography and other related activities. He can also advance at his own pace without commitment to any particular schedule.

Self-guiding trails and tours provide motivation for the visitor to "see it all" and in that way provide himself with the complete story. They can serve large numbers of people.

### (4) Publications

Certain types of publications are advantageous. Picture books, postcards and souvenir oriented materials which can be purchased usually are more completely read and appreciated. Maps and "how to" publications are helpful during the visitation period. Most often, printed hand-outs or free material is consumed in volume, little read, and widely discarded.

Publications serve to furnish detailed information, such as regulations, reference information, and other data which supports sketchy material in other media.



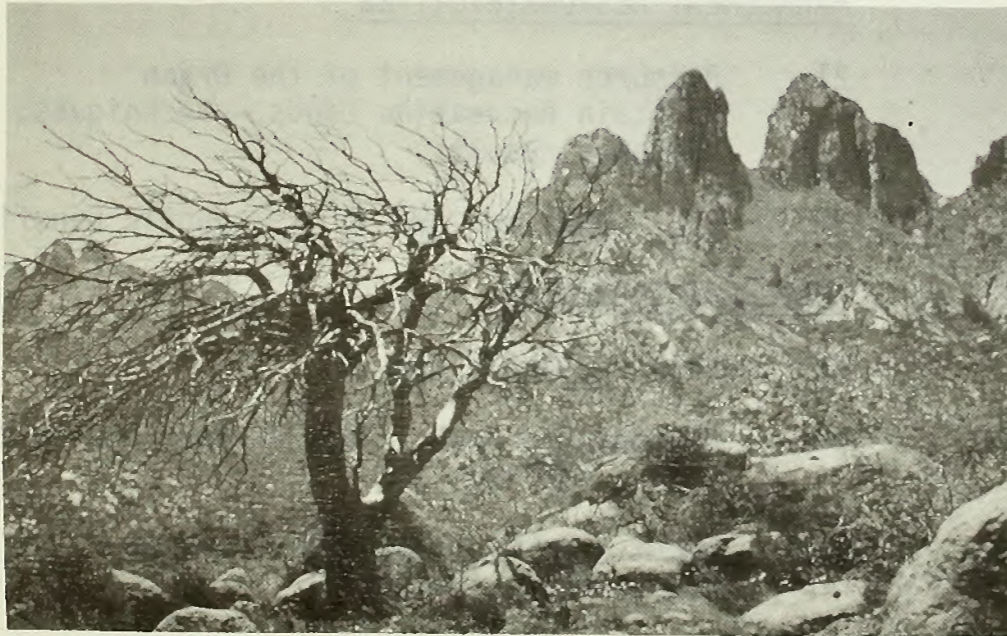


## INTERPRETATION BY SITE

### INTERPRETIVE CENTER

The Interpretive Center should be the anchor point for all interpretation. Localized situations will occur at other places and will contribute to the overall interpretive effort, but most of the wayside and trail side information will be an extension of the Interpretive Center.

A concept of the floor plan and interpretive methods are as follows:



## STORY LINE AND CASE CONTENT - See Page 22

- 1 - 2 False wall panel.
3. Panel detailing recreational activities available in Organ Mountains - Map showing trails and location of major points of interest.

## GEOLOGICAL FORMATIONS AND PROCESSES

4. Dioramic cross section of Organ Mountains including the Rio Grande Valley and Tularosa Basin.
5. Panel for detailed information on geologic processes involved in the formation of the Rio Grande Valley, Tularosa Basin, and Organ Mountains. Provide background for succeeding exhibits.
6. Diorama of eras and periods the mountains have gone through with fossil specimens in stratigraphic sequence.
7. Explanation of erosion processes, how they affect existing structures, fragile balance of the area, etc.
8. Aesthetic display of indigenous materials and gems.



CLIMATE

9. Explanation of wind currents and general weather processes.

ECOLOGY - Fauna

10. Open air display of faunal representatives of the Organ Mountains, mule deer, jack-rabbit, coyote, etc., as well as representative flora. Real life scene separated from observers by a barrier.

ECOLOGY - Ecological Zones

11. Relatively detailed explanation of each ecological zone represented in the Organ Mountains.
12. Dioramic, realistic representation of ecological zones.

ECOLOGY - Flora and Fauna

13. Identification and listing of flora and fauna found in the Organ Mountains.
- 14-15 Panel and case telling the story of endangered species found within the ecological zones as well as specifically indigenous species of flora and fauna.

16. Panel for optional use.

CULTURAL AND HISTORICAL

17. Case on prehistoric activities with artifacts.
- 18-19 Panels with histories, tales, and legends of the area.
20. Case on mining and ranching in the Organ Mountains.

MANAGEMENT RESPONSIBILITIES

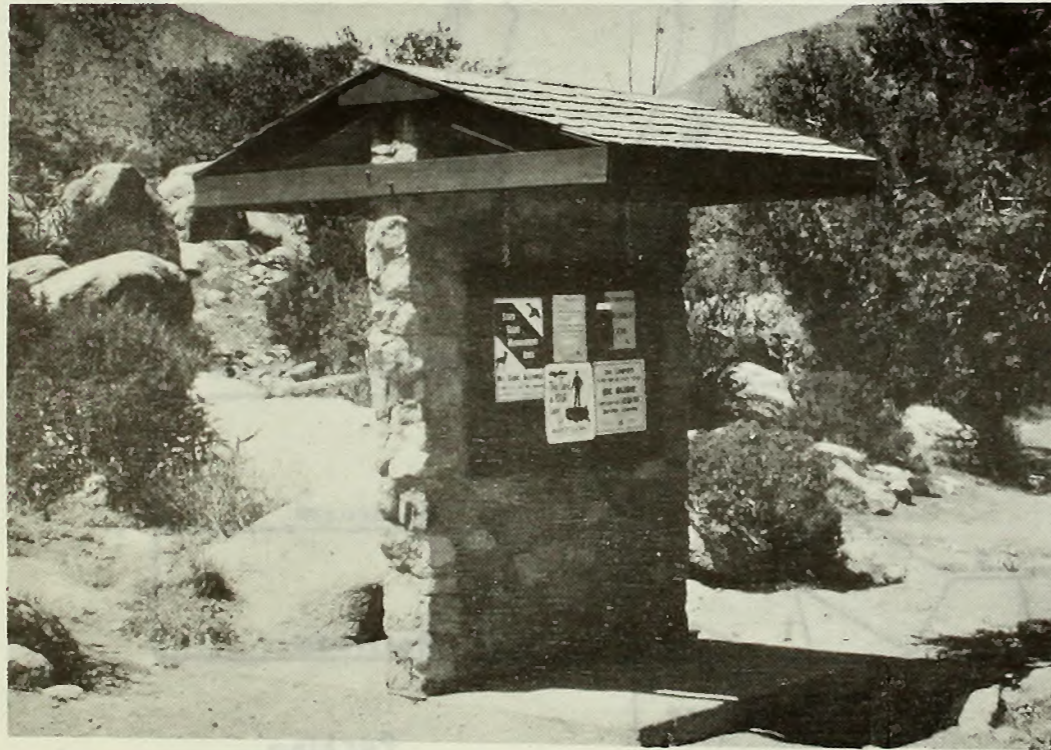
21. Resource management of the Organ Mountain Recreation Lands - techniques, reasons, results.
22. BLM - What and who it is - public benefits

GENERAL INFORMATION

23. Publications display.
24. Attendant's desk - information, publication sales, assistance.
25. Patio - White Sands Missile Range interpretive display.



26. Patio - Area for viewing the mountains, basin area and White Sands Missile Range with pointers, telescopic devices and narrative material describing visual resources.



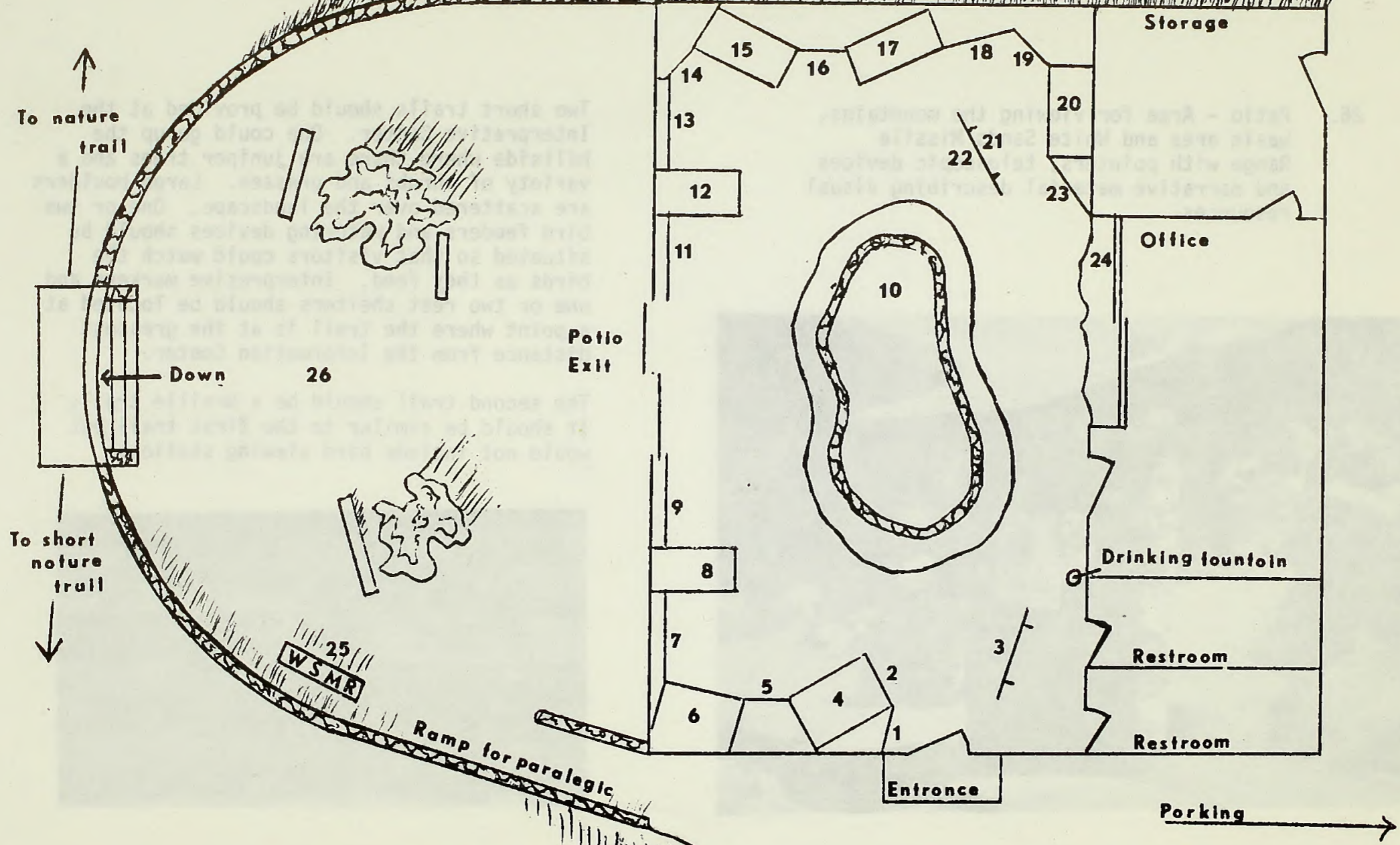
Two short trails should be provided at the Interpretive Center. One could go up the hillside where there are juniper trees and a variety of shrubs and grasses. Large boulders are scattered over the landscape. One or two bird feeders and watering devices should be situated so that visitors could watch the birds as they feed. Interpretive markers and one or two rest shelters should be located at a point where the trail is at the greatest distance from the Information Center.

The second trail should be a Braille trail. It should be similar to the first trail but would not include bird viewing stations.





# INTERPRETIVE CENTER - See page 19 for detail



Scale: 1"=10'



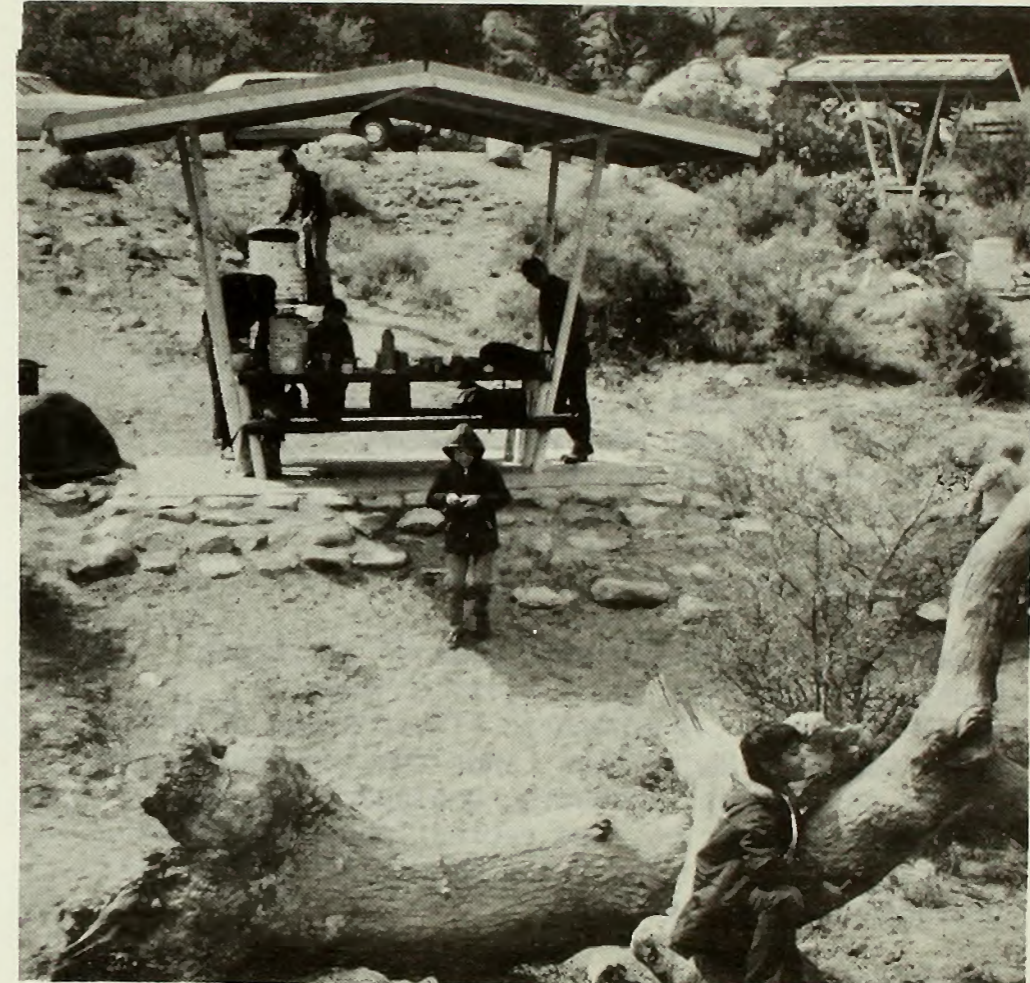
## AGUIRRE SPRING RECREATION SITE

### STORY LINE AND LOCATION OF MEDIA

The Aguirre Spring Site is the only picnic and camping facility planned for development on the east side of the Organ Mountains. Thirty-five family picnic units were constructed in 1971, 26 new units are planned for construction this year. The Pine Tree Trail Head and the east side Baylor Pass Trail Head are located at the picnic ground. About one hundred thousand people visit the site each year. Average length of a visit is four hours.

Aguirre Spring is the focal center of recreational activity. It is the designation point for vehicular traffic. Signs for the purpose of protecting the natural resources as well as directional signs have been placed along the access road. An open air interpretive station, a fire danger bulletin board, and a management policy poster board are located in the picnic grounds. Personnel working in the area also provide limited personal interpretive service.

Additional interpretive media or facilities should be provided in order to take advantage of interpretive opportunities, such as a telescopic station viewing the crags of the upper Organ Needles and Sugarloaf Peak where mountain climbers are frequently visible, or where wildlife can be seen. Naturalist interpretation during heavy visitation periods should be provided.





## SAN AUGUSTIN WAYSIDE

### STORY LINE AND LOCATION OF MEDIA

The parking area at San Augustin Pass on U. S. 70 was constructed by White Sands Missile Range in cooperation with the State of New Mexico Highway Department. Its purpose is to provide parking for cars and trucks during danger periods when experimental missiles are being fired on the range.

The Organ Mountain Recreation Lands interpretive pavilion is located nine hundred feet from the parking lot. A ten foot wide, smooth surface walking trail leads to the pavilion. The facility was constructed by the U. S. Youth Conservation Corps. Visitation exceeds 100 persons per day.

A panorama view of the east side of the Organ Mountains and White Sands Missile Range is available here. A schematic illustration of the Organ Mountain Recreation Lands showing boundaries, points of interest including geologic features, life zone boundaries, and recreational opportunities available in the Organ Mountains should be provided at the pavilion.

## SOLEDAD ECOLOGY GARDEN

### STORY LINE AND LOCATION OF MEDIA

The Soledad Ecology Garden is a natural area



which has been fenced and set aside as a study area. Vegetative species are like those found in the Lower Sonoran Life Zone. The terrain is rugged and incorporates a canyon type situation with vertical structures, abutment approaches, and level ground. The four compass aspects with different environments are found there.

New Mexico State University, two high schools, five junior high schools, and a citizen population of 45,000 people are within 35 minutes driving time of the site.

An interpretive trail and wayside station should be provided at the site. Detailed information about each subject should be provided. Facilities located here should be compatible with the area and designed to resist vandalism and theft.



## TRAILS

The Organ Mountain Trails are part of the National Recreation Trails System. The Pine Tree Trail is a circle trail for hikers. The Baylor Pass Trail is a horseback and hiking trail beginning on either side of the mountains and extending to the other side through Baylor Pass. Each trail is approximately four and one-half miles long. They rise from the Upper Sonoran ecological zone to the Alpine Zone.



## PINE TREE TRAIL

### STORY LINE AND LOCATION OF MEDIA - see Page 27

1. Sign depicting the route that the trail follows, elevations of climb, length of trail, distance to the rest areas and approximate walking time.
2. Sign offering a choice of right or left routes.
3. The first view of Pine Tree Creek is here. The upper half of Sugarloaf Peak can also be seen from this site on the right hand trail. These are good places for trail side interpretations of geology, watershed, and the view.

Particular attention could be given to the structure of Sugarloaf Peak, the Needles, and the alluvial fans. Watershed is to the east on this side of the mountains and drains into the Lake Lucero area of the Tularosa Basin. The view encompasses White Sands Missile Range, White Sands National Monument, the Alamogordo area, and the Sacramento Mountains 50 miles east of the Organs.

4. Alligator junipers occur here, also sotol, yucca elata, and Gambel's oak. Stationary placques should be mounted here with legends identifying the species and its environmental location. A bird feeding station could be



located here also, with a bird identification poster positioned nearby.

5. Indian Hollow is in view here. It is one of the important mule deer wintering areas. Sugarloaf Peak is also in full view at this site. Frequently mountain climbers can be seen on the peak. A trail side information station should be located here.

6. Pine trees shade the trail here. The trail has entered the transition ecozone. Springs fed by water from the upper spire formations provide an environment of greenery and shade. A wayside station should be located here.

7. At these locations, the trail leads out onto rocky points where White Sands Missile Range, Indian Hollow, Sugarloaf Peak, The Needles, and Rabbit Ears Peaks are visible. These are excellent locations for panoramic interpretation. Visual distances range  $u\frac{1}{2}$  to 125 miles including Sierra Blanco in the Lincoln National Forest, White Sands National Monument, Sacramento Peak Observatory and the City of Alamogordo.

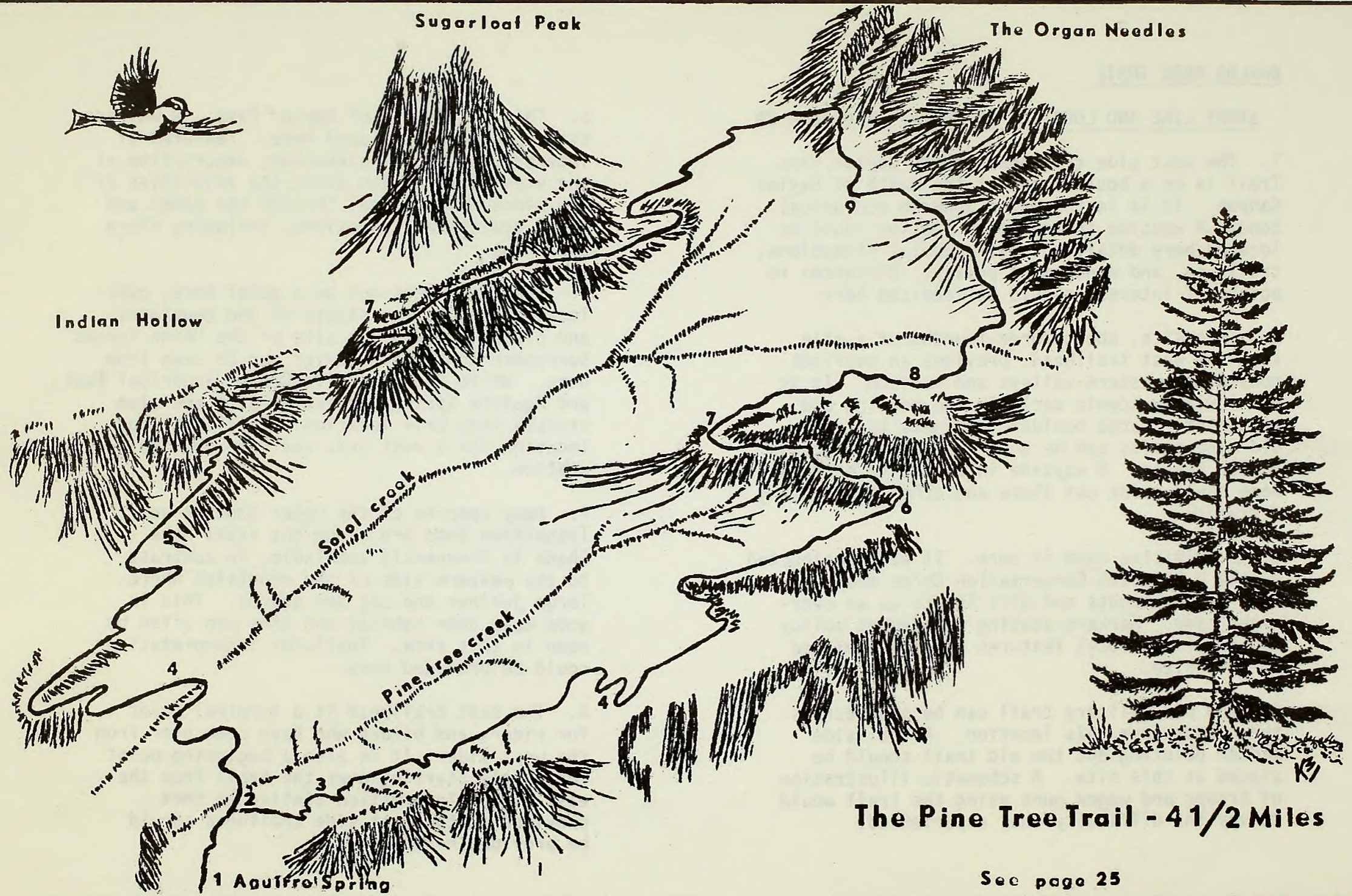
8. The trail crosses the head tributaries of Sotol Creek. *Yucca elata*, sotol, and several species of cacti mingle with Gambel's oak, mountain mahogany and other deer browse. Deer may be seen in this area and their tracks are often found on the trail. Other species

of mammals are often observed here also, including rabbits, badgers, gophers, and skunks. Trailside interpretation should be provided here.

9. This is the apex of Pine Tree Trail. Geologic formations form support abutments for the spire formations above. Wild roses, pine trees, and 400-year old alligator junipers occur here. The area is remote and quiet. A wilderness camp is located here, providing opportunity for wayside interpretation, rest, and meditation. Bird feeders could be located here to attract birds more common to the upper elevations.







Sugarloaf Peak

The Organ Needles

Indian Hollow

Solol creek

Pine tree creek

1 Aguffro Spring

The Pine Tree Trail - 4 1/2 Miles

See page 25



## BAYLOR PASS TRAIL

### STORY LINE AND LOCATION OF MEDIA - See Page 29

1. The west side trailhead of the Baylor Pass Trail is on a boulder fan at the mouth of Baylor Canyon. It is in the Upper Sonoran ecological zone. A wayside interpretive station could be located here detailing environmental situations, trail use, and management policy. Distances to points of interest should be itemized here.

2. This site, about three-fourths of a mile from the west trailhead, provides an overlook toward the western valleys and horizon. It is particularly scenic early in the morning and at sunset. Large boulders dominate the site. Old mine shafts can be seen to the north across Baylor Canyon. A wayside interpretive station here could point out these and other interesting features.

3. A primitive camp is here. It was constructed by the U.S. Youth Conservation Corps and is used by Boy Scouts and Girl Scouts as an overnight camp. Markers stating management policy and detailing local features should be placed at this site.

4. The old military trail can be seen across the canyon from this location. A trailside marker pointing out the old trail should be placed at this site. A schematic illustration of troops and wagon guns using the trail would convey the difficulty they experienced.

5. This is the top of Baylor Pass. A wayside station should be placed here. Features of interest would be: elevation; description of the view; information about the velocities of the winds which funnel through the pass; and local ecological situations, including flora and fauna.

6. The trail goes out on a point here, overlooking the eastern slopes of the mountains and plains below. The site of the Union Forces' surrender to Captain Baylor can be seen from here. White Sands Missile Range, Sugarloaf Peak, and Aguirre Spring Recreation Site are also visible from this location. This is a good location for a rest area and interpretive station.

7. Many species of the Upper Sonoran and Transition Zone are along the trail here. Shade is frequently available, in contrast to the western side of the mountains where large juniper and oak are scarce. This is good mule deer habitat and they can often be seen in this area. Trailside interpretation could be provided here.

8. The east trailhead is a terminal point for riders and hikers who have come over from the west side. It is also a beginning point for people starting over the trail from the east side. Information similar to that provided at the west side trailhead should be provided here.



# Baylor Pass Trail - 4 1/2 Miles

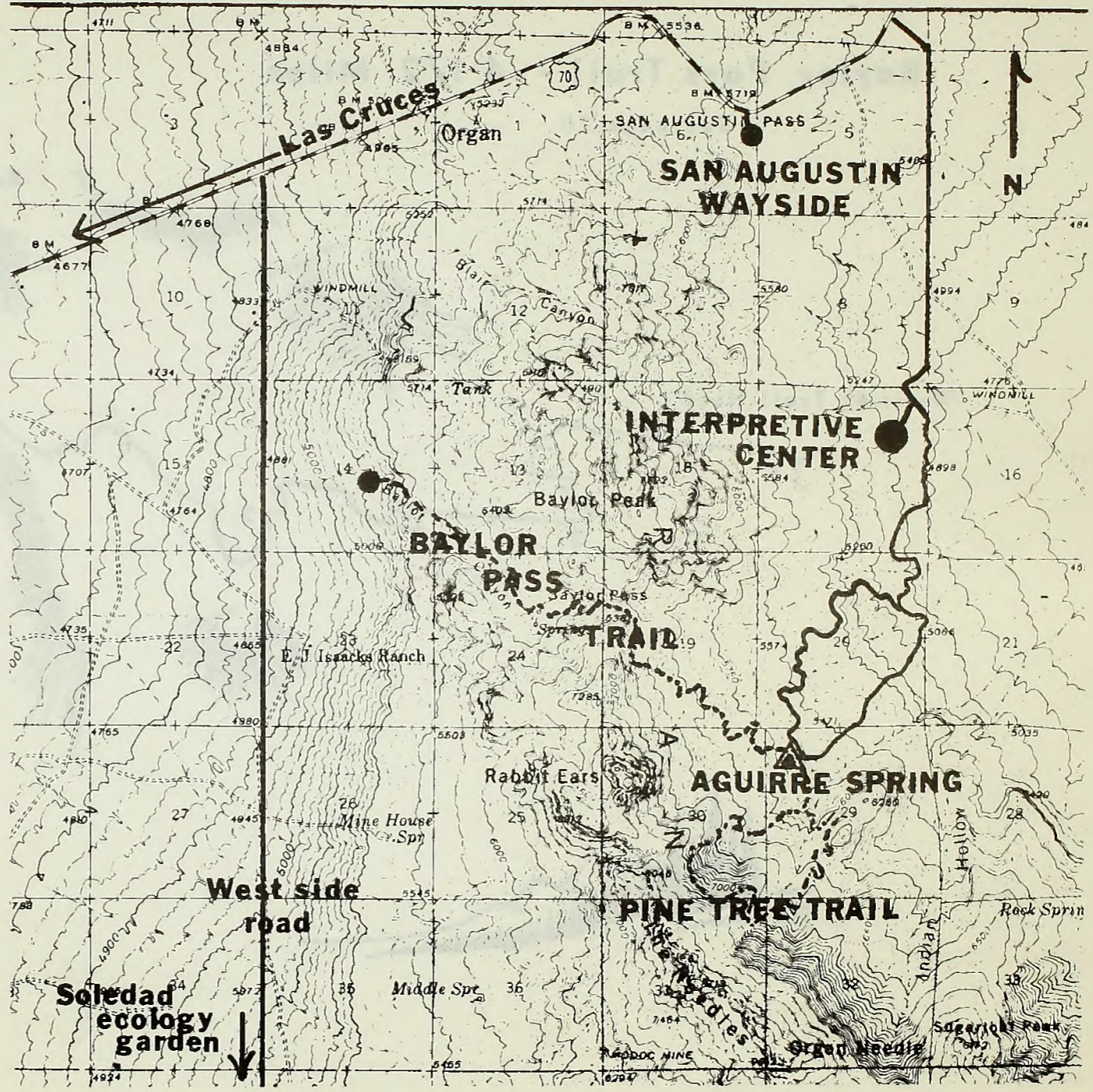
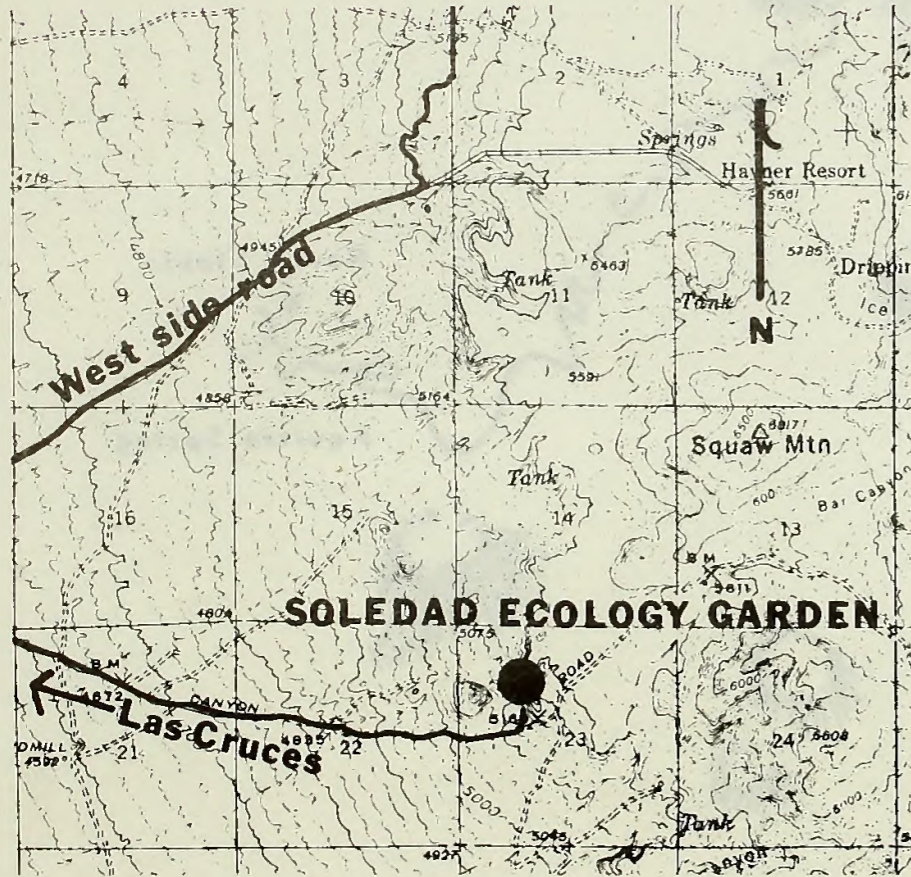
See page 28





INTERPRETATION BY SITE

LOCATION OF MEDIA

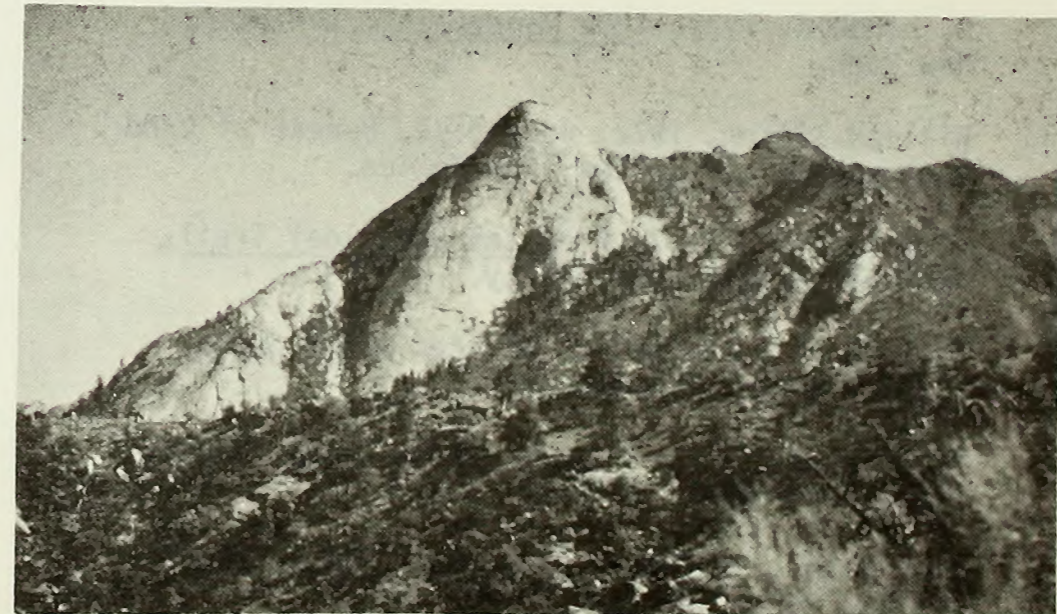




INTERPRETIVE RESOURCES - RAW MATERIAL

- A. 1. Features of Geology
  - a. Physiographic examples
  - b. Geological processes
  - c. Rock and mineral specimens
- 2. Features of Paleontology
  - a. Geologic eras, periods, formations
  - b. Plant fossils
  - c. Animal fossils
- B. 1. Features of the Plant Community (flora)
  - a. Ecological interrelationships and processes
  - b. Plant habitats, life zones, etc.
  - c. Plant specimens
- C. 1. Features of the Animal Community (fauna)
  - a. Biotic interrelationships and processes
  - b. Animals, birds, insects, reptiles
  - c. Biotic habitats
  - d. Specimens
- D. 1. Features of Climate - Hydrologic Cycle
  - a. Weather patterns, storm seasons, etc.
  - b. Temperature variations
  - c. Cloud formations
  - d. Rainfall - snow depth

- E. 1. Features of Past Human Occupation
  - a. Evidence of prehistoric occupation
  - b. Historical evidence (explorers, ranchers, military actions, etc.)
  - c. Legends, tales, etc.
- 2. Features of Contemporary Man
  - a. Resource use
  - b. Range Management
  - c. Habitat improvement (wildlife)
  - d. Refuge management (quail)
  - e. Fire protection
  - f. White Sands Missile Range





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